

1. Work requester fills out this section.

☐ Standing Work Permit

Requester: Vlad Pantuev	Date: 11/19/03	Ext: 632-8112	Dept/Div/Group: PHENIX
Other Contact person (if different from requester): Thomas Shea			Ext: 3454
Work Control Coordinator: Thomas Shea		Start Date: 11/19/03	Est. End Date: 11/21/03
Brief Description of Work: Replace power supplies on Drift Chamber			
Building: 1008	Room: IR	Equipment: Ladder, Hand tools	Service Provider: Requester

2. WCC, Requester/Designee, Service Provider, and ES&H (as necessary) fill out this section or attach analysis

ES&H ANALYSIS

Radiation Concerns	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Activation	<input type="checkbox"/> Airborne	<input type="checkbox"/> Contamination	<input type="checkbox"/> Radiation	<input type="checkbox"/> Other
<input type="checkbox"/> Special nuclear materials involved, notify Isotope Special Materials Group			<input type="checkbox"/> Fissionable materials involved, notify Laboratory Criticality Officer			
Safety Concerns	<input type="checkbox"/> None	<input type="checkbox"/> Ergonomics		<input type="checkbox"/> Transport of Haz/Rad Material		
<input type="checkbox"/> Adding/Removing Walls or Roofs	<input type="checkbox"/> Confined Space*	<input type="checkbox"/> Explosives	<input type="checkbox"/> Lead*	<input type="checkbox"/> Penetrating Fire Walls		
<input type="checkbox"/> Asbestos*	<input type="checkbox"/> Corrosive	<input type="checkbox"/> Flammable	<input type="checkbox"/> Magnetic Field*	<input type="checkbox"/> Pressurized Systems		
<input type="checkbox"/> Beryllium*	<input type="checkbox"/> Cryogenic	<input type="checkbox"/> Fumes/Mist/Dust*	<input type="checkbox"/> Material Handling	<input type="checkbox"/> Rigging/Critical Lift		
<input type="checkbox"/> Biohazard*	<input type="checkbox"/> Electrical	<input type="checkbox"/> Heat/Cold Stress	<input type="checkbox"/> Noise*	<input type="checkbox"/> Toxic Materials*		
<input type="checkbox"/> Chemicals*	<input checked="" type="checkbox"/> Elevated Work*	<input type="checkbox"/> Hydraulic	<input type="checkbox"/> Non-ionizing Radiation*	<input type="checkbox"/> Vacuum		
	<input type="checkbox"/> Excavation	<input type="checkbox"/> Lasers*	<input type="checkbox"/> Oxygen Deficiency*	<input type="checkbox"/> Other		

* Does this work require medical clearance or surveillance from the Occupational Medicine Clinic? ☐ Yes ☒ No

Environmental Concerns	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Work impacts Environmental Permit No.	
<input type="checkbox"/> Atmospheric Discharges (rad/non-rad)	<input type="checkbox"/> Land Use	<input type="checkbox"/> Soil activation/contamination	<input type="checkbox"/> Waste-Mixed
<input type="checkbox"/> Chemical or Rad Material Storage or Use	<input type="checkbox"/> Liquid Discharges	<input type="checkbox"/> Waste-Clean	<input type="checkbox"/> Waste-Radioactive
<input type="checkbox"/> Cesspools (UIC)	<input type="checkbox"/> Oil/PCB Management	<input type="checkbox"/> Waste-Hazardous	<input type="checkbox"/> Waste-Regulated Medical
<input type="checkbox"/> High water/power consumption	<input type="checkbox"/> Spill potential	<input type="checkbox"/> Waste-Industrial	<input type="checkbox"/> Underground Duct/Piping
Waste disposition by:		<input type="checkbox"/> Other	

Pollution Prevention (P2)/Waste Minimization Opportunity: ☒ None ☐ Yes

FACILITY CONCERNS	<input checked="" type="checkbox"/> None
<input type="checkbox"/> Access/Egress Limitations	<input type="checkbox"/> Electrical Noise
	<input type="checkbox"/> Potential to Cause a False Alarm
<input type="checkbox"/> Configuration Control	<input type="checkbox"/> Impacts Facility Use Agreement
	<input type="checkbox"/> Temperature Change
	<input type="checkbox"/> Other
	<input type="checkbox"/> Maintenance Work on Ventilation Systems
	<input type="checkbox"/> Utility Interruptions

WORK CONTROLS

Work Practices
<input type="checkbox"/> None
<input checked="" type="checkbox"/> Back-up Person/Watch
<input type="checkbox"/> Barricades
<input type="checkbox"/> Exhaust Ventilation
<input type="checkbox"/> HP Coverage
<input type="checkbox"/> IH Survey
<input type="checkbox"/> Lockout/Tagout
<input type="checkbox"/> Posting/Warning Signs
<input type="checkbox"/> Scaffolding-requires inspection
<input type="checkbox"/> Spill Containment
<input type="checkbox"/> Time Limitation
<input type="checkbox"/> Warning Alarm (i.e. "high level")
<input type="checkbox"/> Security (see Instruction Sheet)
<input type="checkbox"/> Other

Protective Equipment

<input type="checkbox"/> None	<input type="checkbox"/> Ear Plugs	<input type="checkbox"/> Gloves	<input type="checkbox"/> Lab Coat	<input type="checkbox"/> Safety Glasses
<input type="checkbox"/> Coveralls	<input type="checkbox"/> Ear Muffs	<input type="checkbox"/> Goggles	<input type="checkbox"/> Respirator	<input checked="" type="checkbox"/> Safety Harness
<input type="checkbox"/> Disposable Clothing	<input type="checkbox"/> Face Shield	<input type="checkbox"/> Hard Hat	<input type="checkbox"/> Shoe Covers	<input type="checkbox"/> Safety Shoes
				<input type="checkbox"/> Other

Permits Required (Permits must be valid when job is scheduled.)

<input checked="" type="checkbox"/> None	<input type="checkbox"/> Cutting/Welding	<input type="checkbox"/> Impair Fire Protection Systems
<input type="checkbox"/> Concrete/Masonry Penetration	<input type="checkbox"/> Digging/Core Drilling	<input type="checkbox"/> Rad Work Permit-RWP No
<input type="checkbox"/> Confined Space Entry	<input type="checkbox"/> Electrical Working Hot	<input type="checkbox"/> Other

Dosimetry/Monitoring

<input checked="" type="checkbox"/> None	<input type="checkbox"/> Heat Stress Monitor	<input type="checkbox"/> Real Time Monitor	<input type="checkbox"/> TLD
<input type="checkbox"/> Air Effluent	<input type="checkbox"/> Noise Survey/Dosimeter	<input type="checkbox"/> Self-reading Pencil Dosimeter	<input type="checkbox"/> Waste Characterization
<input type="checkbox"/> Ground Water	<input type="checkbox"/> O ₂ /Combustible Gas	<input type="checkbox"/> Self-reading Digital Dosimeter	<input type="checkbox"/> Other
<input type="checkbox"/> Liquid Effluent	<input type="checkbox"/> Passive Vapor Monitor	<input type="checkbox"/> Sorbent Tube/Filter Pump	

Training Requirements (List below specific training requirements)

Fall Protection	
Based on analysis above, the Walkdown Team determines the risk, complexity, and coordination ratings below:	
ES&H Risk Level:	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
Complexity Level:	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
Work Coordination:	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High
If using the permit when all hazard ratings are low, only the following need to sign: (Although allowed, there is no need to use back of form)	
WCC: <i>[Signature]</i>	Date: 11/19/03
Service Provider:	Date:
Authorization to start	Date:
(Departmental Sup/WCC/Designee)	

3. Both work requester and service provider contribute to work plan (use attachments for detailed plans)

Work Plan (procedures, timing, equipment, and personnel availability need to be addressed):

- Ensure that power to the DC electronics is secured and that the CM power key is locked out of use.
- Erect and secure 1 (or 2 side by side if necessary) extension ladders between the top of the central magnet outrigger and the rich detector.
- Set up a tie off point just above the working position using the building crane and an adequately rated sling.
- The position of the tie off point is to be set for each working level and the crane must be locked out before the worker ascends the ladder.
- The worker is to use a body harness with a short clip on lanyard and tie off before starting work.
- A watch must be present at all times when a person is on the ladders
- Remove repair and reinstall power supply modules as necessary.

Special Working Conditions Required:

Operational Limits Imposed:

Post Work Testing Required:

Job Safety Analysis Required: ☐ Yes ☒ No

Walkdown Required: ☐ Yes ☒ No

Reviewed by: Primary Reviewer will determine the size of the review team and the other signatures required based on hazards and job complexity. Primary Reviewer signature means that the hazards and risks that could impact ES&H have been identified and will be controlled according to BNL requirements.

Title	Name (print)	Signature	Life #	Date
Primary Reviewer				
ES&H Professional				
Other				
Other				
Work Control Coordinator	THOMAS SHEA	<i>[Signature]</i>	20208	11/19/03
Service Provider				
Review Done: <input type="checkbox"/> in series <input type="checkbox"/> team				

4. Job site personnel fill out this section.

Note: Signature indicates personnel performing work have read and understand the hazards and permit requirements (including any attachments).

Job Supervisor:		Contractor Supervisor:	
Workers:	Life#:	Workers:	Life#:
<i>V. Pawtugol</i>	P6221		

Workers are encouraged to provide feedback on ES&H concerns or on ideas for improved job work flow. Use feedback form or space below.

5. Departmental Job Supervisor, Work Control Coordinator/Designee

Conditions are appropriate to start work: (Permit has been reviewed, work controls are in place and site is ready for job.)

Name:	Signature:	Life#:	Date:
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6. Departmental Job Supervisor, Work Requester/Designee determines if Post Job Review is required. ☐ Yes ☐ No

Post Job Review (Fill in names of reviewers)

Name:	Signature:	Life#:	Date:
Name:	Signature:	Life#:	Date:

7. Worker provides feedback.

Worker Feedback (use attached sheets as necessary)

a) WCM/WCC: Is any feedback required? ☐ Yes ☐ No

b) Workers: Are there better methods or safer ways to perform this job in the future? ☐ Yes ☐ No

8. Closeout: Work Control Coordinator (authorizing dept.) checks quality of completed permit and ensures the work site is left in an acceptable condition. (WCC can delegate clean up of work area to work supervisor)

Name: THOMAS SHEA	Signature: <i>[Signature]</i>	Life#: 20208	Date: 11/24/03
Comments: WORK COMPLETED WITHOUT INCIDENT.			